

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND**

IN RE MICROSOFT CORPORATION
ANTITRUST LITIGATION

This Document Relates to:

Burst.com, Inc. v. Microsoft Corp.

Civil Action No. C-02-2930-VRW

MDL Docket No. 1332

MICROSOFT CORP.'S RESPONSE CLAIM CONSTRUCTION BRIEF

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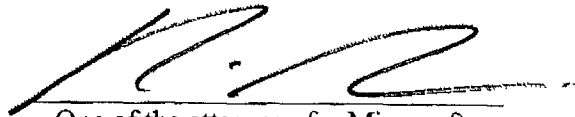
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CERTIFICATE OF SERVICE

The undersigned attorney for Microsoft hereby certifies that on February 2, 2004 he sent a true and exact copy of MICROSOFT CORP.'S RESPONSE CLAIM CONSTRUCTION BRIEF via e-mail to:

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The fundamental premise of Burst's proposed claim construction and its brief is that it invented, claimed, and thus owns, sending audio/video data faster than its normal play time. Indeed, Burst begins its Claim Construction Brief with the following description of the purportedly unique feature of the "Asserted Patents":

The Asserted Patents differ from other multi-media delivery mechanisms and methods by delivering the audio and video information in a compressed state where the transmission time is shorter than the real time transmission or viewing of the information. For example, practicing the BURST Asserted Patents provides a convenient way for a video program having a viewing time (*i.e.*, the running length of the program) of one hour to be compressed and transmitted in a transmission time less than one hour.

Burst.com, Inc.'s Opening Claim Construction Brief ("B Br.") at 1. But Burst's patents do not differ from "other multi-media delivery mechanisms and methods" merely because the "the transmission time is shorter than the real time transmission or viewing of the information." "Faster than real time" delivery was well-known before Mr. Lang applied for the '995 patent in 1988. For example, U.S. Patent No. 4,506,387 to Walter, which issued in 1985 and was reviewed by the Patent Examiner before allowing Burst's claims, describes "delivering the audio and video information in a compressed state" in less than real time, noting that "a two hour movie can be transmitted in about 31 seconds." Ex. G, '387 patent, col 7, lines 44-45.

Once it is understood that Mr. Lang did not invent "faster than real time" delivery, one must ask what he did invent, and what his claims cover. While the full answer depends on a careful claim construction, even a cursory examination of Burst's patents reveals a controlling fact. These patents describe a VCR-like consumer electronics device, called a VCR-ET, and connecting two such dedicated hardware units using a known bandwidth connection (*e.g.*, a fiber optic telephone line). Burst's patent claims reflect the system that Mr. Lang invented, as described in Burst's patents.

As a matter of patent law, all of Burst's apparatus claims, because they use the "means plus function" claiming format, incorporate by reference the system described in the specification. This claiming style, therefore, changes the infringement analysis from one of comparing the claim language to

the accused product to one of comparing the accused product to the device described in the specification. Burst chose this claiming style and as a result, its claims are now presumed to be subject to the strictures of Section 112, ¶ 6. To avoid the express effect of the statute, Burst must show that the claim language includes definite structure. But Burst simply declines to undertake this exercise, trying to avoid the fact that its means elements claim the specific device described in the specification. Before the Court or the parties can analyze infringement, the Court must identify the corresponding structures in the specification to provide the measure against which the accused product will later be compared.

The patents simply do not disclose a software solution for the delivery of audio/video files over the Internet. Indeed, Mr. Lang admits that he had not even heard of the Internet at the time of the alleged invention in 1988, Ex. F, Lang Dep. at 57, and Burst's expert admits that Burst's patents do not describe a general purpose computer. Ex. E, Stevenson Dep. at 241. Further, the system claimed in the Burst patents would not, contrary to Burst's unsupported assertion, work over undisclosed communications networks and indeed, would need to be substantially redesigned to work over the Internet. Ex. D, Von Herzen Decl., ¶ 20. And yet, Burst attempts to shoehorn Microsoft's software solutions into the narrow claims of its patents.¹

Burst's patents do not have the "broad claims" that Burst asserts, and it reaches the opposite conclusion only by impermissibly "construing" many limitations right out of its claims. Burst's claims must be construed to give all their words meaning as those words are used in the context of the claims and in view of their ordinary meaning and the intrinsic evidence. Under this analysis, claim limitations such as "compression means," "time compressed representation [of audio/video source information]," "having an associated time period," and "transceiver" claim the dedicated hardware and fixed bandwidth system that Mr. Lang invented and described in the patent. Burst, however, feigns surprise when the intrinsic evidence shows that these terms are no broader than the actual invention. But

¹ Burst also discusses reducing start up delays although its patents never discuss this. B Br. at 1-2. Microsoft accused software, however, has this feature. Burst improperly tries to construe its claims based on Microsoft's accused software, rather than using the ordinary meaning of those claims and the intrinsic evidence. *Jurgens v. McKasy*, 927 F.2d 1552, 1560 (Fed. Cir. 1991) ("claim is construed without regard to the accused product"). Similarly, Burst discusses client side storage although none of its claims concerns the recipient of the "time compressed" data, only the sender. B Br. at 2.

there is no basis in patent law to construe the claims to cover either the prior art (the delivery of content “faster than real time”) or what Mr. Lang clearly did not invent (using the Internet and software solutions). Moreover, Burst errs by construing its claims based on Microsoft’s accused software rather than based on the intrinsic evidence and their ordinary meaning.

Finally, Burst implies that Microsoft’s positions here should be discarded *in toto* as unbelievable simply because of the sheer number of issues. Burst’s complaints are ill-founded. First, as explained below, only a few central disputes exist concerning language used widely in the 80 asserted claims. Second, the bulk of the remaining disputes arise from Burst’s denial that it used the “means plus function” claiming format – although each element uses the term “means” and is thus presumptively in such format – and its related refusal to provide a meaningful identification of the structure described in the specification that corresponds to each such claim element. Instead, Burst has forced the Court and Microsoft to march one-by-one through each and every means element in its asserted apparatus claims – analyzing first whether Burst has overcome the presumption that Section 112, ¶ 6 applies and then identifying which structure the specification discloses for the recited function. Identifying the structure in the specification that corresponds to the recited function is always a required task for the Court when means plus function claims are asserted, and thus the number of times that task must be performed depends solely on the number of means elements in the accused claims.²

ARGUMENT

A. **“Compressing ... Source Information Into a Time Compressed Representation Thereof Having an Associated Burst Time Period.”**

Burst interprets this claim language to require no more than compressing data and later transmitting that data faster than its normal play time. Such a construction ignores the claim language – writing out “into,” “time,” “having,” and “associated.” Moreover, such a construction ignores that the Patent Office allowed Burst’s claims after reviewing prior art, such as the Walter patent, which discloses exactly what Burst now asserts its claims cover. MS Br. at 23.

² Also, from Burst’s infringement allegations, Microsoft identified certain terms as needing construction. Although it

1. **A Representation “Having An Associated Burst Time Period”**

Virtually all of Burst’s claims recite “compressing said audio/video source information into a time compressed representation thereof having an associated burst time period.”³ Burst’s claims therefore unambiguously require three features: (1) that the “associated burst time period” be associated with the “time compressed representation” immediately upon and as a result of the compressing, (2) that the “time compressed representation” possess a single “associated burst time period,” and (3) that the “associated burst time period” be combined, joined, or united with the “time compressed representation.” Burst, however, attempts to “construe” these important context-based limitations right out of the claims by asking the Court to construe “associated” while ignoring the ordinary words – “into” and “having” – that link the “burst time period” to the “time compressed representation” and to the “compressing” function. *Brookhill-Wilk I LLC v. Intuitive Surgical Inc.*, 334 F.3d 1294, 1299 (Fed. Cir. 2003) (“While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.”).

At the onset, the ordinary English words used in the claims say that the “associated burst time period” must be associated with the “time compressed representation” as a result of the compressing, not at some indeterminate later time. The claims describe “compressing” “into” a “time compressed representation having an associated burst time period.” Upon completing the compressing process, therefore, this burst transmission time period must already be associated with the “representation.” It is not consistent with the claim language to determine that transmission time later.

This plain language is entirely consistent with what Mr. Lang described in the specification. The patents describe and claim a fixed bandwidth connection between two VCR-ETs, and in that context, one knows the connection bandwidth in advance, allowing one to compress an audio/video file “into a time compressed representation having” a known “burst time period” – *i.e.*, transmission time.

believes many are not different in scope, until it received Burst’s assent it could not be sure Burst agreed. Microsoft offered to work with Burst to reduce the number of disputed terms, but Burst never followed through.

³ Burst’s claims use slight variations in language for this term. Neither party argues that the variance in claim language

Using the example described in the patents, if one compresses two hours of audio/video data into 250 megabytes and intends to send it over a fixed 200 megabyte per second connection, the “associated burst time period” – the transmission time – is easily known immediately after compression as 1.25 seconds (250/200). *See* Ex. A, ‘995 patent, col. 5, lines 20-24, col. 7, lines 55-58. Burst, however, impermissibly ignores the claim language to construe this term based on Microsoft’s accused software and its use of the Internet, although the patents-in-suit are not directed to, nor do they contemplate, using the Internet to transmit audio/video data. *See Jurgens*, 927 F.2d at 1560 (“claim is construed without regard to the accused product”).

Moreover, the “time compressed representation” must possess a single “associated burst time period.” The claim’s plain English says that, upon compressing the “audio/video” into the “time compressed representation,” the “representation” must possess – *i.e.*, “hav[e]” – “an associated burst time period.” Later, many of the claims describe “transmitting” the “representation” “in said burst time period.” Thus, the “representation” must have a single “associated burst time period,” not some unknowable number of time periods. Burst, however, argues that the “associated burst time period” need not be determined from compression (contrary to the claim requirement that the source information be compressed “into” a representation “having” an associated burst time) but can be whatever amount of time it later takes to transmit the data over the Internet – potentially an infinite number of different times because, as in Microsoft’s system, different users receive the same “representation” in different amounts of time. A construction allowing a potentially infinite number of transmission times is plainly inconsistent with the claim language’s requirement that the data “hav[e] an associated” transmission time.

Further, the claims say that the “representation” must “hav[e] an associated burst time period,” not merely that the “representation” “hav[e] a burst time period.” As a claim term, “associated” must have a meaning, and the claims cannot be read as if “associated” was not there. *See Exxon Chem Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1557 (Fed. Cir. 1995). In ordinary English, “associated” means combined, joined, or united. Ex. R, *Webster’s New Collegiate Dictionary* (1979) at 67; Microsoft

changes the meaning of this term.

Corp.'s Opening Claim Construction Brief ("MS Br.") at 31-32. This meaning requires that the "burst time period" be combined, joined, or united with the "representation."⁴

Burst, using the same dictionary, cites to a different definition of "associated" – "to bring together in any of various ways (as in memory or imagination)." B Br. at 19. This definition, however, supports Microsoft because, in the context of the claim language, "associated" means "bring[ing]" the "burst time period" "together ... in memory" – *i.e.*, in the claimed storage – with the "representation" when the data is compressed.

Avoiding the plain meaning of the words read in context, Burst construes its claims to require only that there be "a relationship between a thing (*e.g.*, a time compressed representation) and a period of time." B Br. at 19.⁵ From its infringement allegations, Burst apparently will argue that any later transmission time necessarily has a "relationship" with the "time compressed representation," no matter what the ultimate transmission time is, how many different transmission times there are, or when any such transmission time becomes known. In short, Burst's construction impermissibly reads entirely out of the claims a whole series of connecting words – "into" and "having" – and even the term "associated" itself. After all, if simply being transmitted was enough to satisfy the "associated" limitation, under Burst's construction, a "representation" would always have "an associated burst time period." And hence, Burst's construction runs smack into the fundamental problem that Burst really asserts that it claimed all "faster than real time" transmission of audio/video data, which is demonstrably false.

Burst's proposed definition fails the test of *Sulzer Textil A.G. & Sulzer Textile v. Picanol N.V.*, 351 F.3d 1120 (Fed. Cir. 2003) that "the district court normally will need to provide the jury in a patent case with instructions [*i.e.*, claim construction] adequate to ensure that the jury fully understands the court's claim construction rulings and what the patentee covered by the claims." *Id.* at 1129. Burst

⁴ Burst, however, argues that the Webster Dictionary definition of "associated" is limited to chemistry. B Br. at 19. This argument simply misreads the dictionary: (a) the second cited definition of "to combine or join with other parts: UNITE" makes no mention of chemistry, Ex. R, *Webster's* at 67, and (b) with regard to the first definition cited, the dictionary expressly states that the abbreviation "specif" after a definition is a "common but highly restricted meaning subsumed in the more general preceding definition." Ex. X, *Webster's* at 17a. As a result, Burst is flat wrong in its assertion that the definition applies only to chemistry.

⁵ Burst claims that its construction "is consistent with the intrinsic evidence and the claims per *Texas Digital*" but never explains why or how. B Br. at 20. As demonstrated, Burst's construction is not consistent with the claims or evidence.

would leave the jury to determine what “relationship” means. In a distorted implementation of *Markman*, the parties would likely have to ask the jury to decide not the operation of Microsoft’s software, but the meaning of “relationship” in the construction of this term. See *Sulzer Textil*, 351 F.3d at 1129 (“This means that, as to claim coverage, the district court must instruct the jury on the meanings to be attributed to all disputed terms used in the claims in suit so that the jury will be able to ‘intelligently determine the questions presented.’”).

2. “Time Compressed Representation”

Microsoft has construed the term “time compressed representation” by determining its ordinary meaning, reviewing the file history to see if the file history confirms that definition (which it does), and then reviewing the specification to see if it mandates a different meaning. This is exactly what the law requires. See *Texas Digital Sys. v. Telegenix, Inc.*, 308 F.3d 1193, 1204-05 (Fed. Cir. 2002). The Court should therefore construe the claim term “time compressed representation” to mean compressing the audio/video source information small enough to be transmitted in a predetermined time period – *i.e.*, an associated time period known when the data is compressed.⁶

Burst’s proposed construction is simply flawed, using vague words to obscure that now – 15 years after it applied for its patents – it is trying to claim data compression generally although Mr. Lang admittedly did not invent ordinary data compression. B Br. at 8 (“an information structure that reduces a temporal quality of the information”). Burst all but admits that under its construction, its claims would cover all use of regular data compression whenever some of the compressed data has a time base – *e.g.*, a normal play time. Thus, Burst says:

MICROSOFT also attempts to establish that a **time compressed representation** “is not the same as compressed data” in an ongoing effort to drive a wedge between the ordinary compression taught by the ‘995 Patent and ... the specified form of time compression advocated by MICROSOFT. ... The ‘995 Patent specification explicitly discloses ordinary data compression as it makes numerous references to traditional “*data compression techniques[s]* for efficient storage, transmission, and reception of a digitized audio/video program.” B Br. at 20.

⁶ Burst also construes “representation” as “an information structure,” although the construction of this term has never been in dispute. B Br. at 8. Microsoft does not disagree with this construction although it unnecessarily complicates what should really be construed simply as “data.”

Thus, Burst's argument, at its core, is that because the specification discloses regular data compression, its claim must therefore reach all ordinary compression of time-related data. *Id.* Not only does that construction overreach, this argument also suggests that because the specification discloses regular compression, the term "time compressed representation" should be rewritten to mean simply "compressed representation."

The claims, not the specification, define the scope of Burst's property rights. Over one hundred years ago, the Supreme Court directly rejected Burst's argument:

The object of the patent law in requiring the patentee to "particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery" is not only to secure to him all to which he is entitled, but to apprise the public of what is still open to them. The claim is the measure of his right to relief, and, while the specification may be referred to limit the claim, it can never be made available to expand it."

McClain v. Ortmyer, 141 U.S. 419, 424, 12 S.Ct. 76, 35 L.Ed. 800 (1891) (emphasis added); *see also Johnson & Johnston Assocs. v. R.E. Serv. Co.*, 285 F.3d 1046, 1052 (Fed. Cir. 2002) (*citing McClain*).⁷

"[I]t is these claims, not the specifications, that afford the measure of the grant to the patentee. 'Out of all the possible permutations of elements which can be made from the specifications, he reserves for himself only those contained in the claims.'" *Milcor Steel Co. v. George A. Fuller Co.*, 316 U.S. 143, 145-46 (1942); *see also Oak Tech., Inc. v. Int'l Trade Comm'n*, 248 F.3d 1316, 1329 (Fed. Cir. 2001) ("More importantly, even if such a disclosure existed, these embodiments would not be covered by the language selected by the claim drafter. In Oak's own words: 'Specifications teach. Claims claim.'").

The meaning of the term in Burst's claims – "time compressed representation" – is clear. "Time compressed" has an ordinary meaning – compressing to reduce the transmission time to a predetermined time. Ex. D, Von Herzen Decl., ¶ 32; MS Br. at 22. That ordinary meaning is shown by the intrinsic evidence in the form of the Haskell patent discussed in the file history. To overcome the

⁷ Strangely, Burst interprets the fact that "time compressed" does not appear in the specification as broadening its claims. B Br. at 11. To the contrary, the specification's failure to use "time compressed" means that the ordinary meaning controls. *See TurboCare Div. of Demag Delaval Turbomachinery Corp. v. Gen. Elec. Co.*, 264 F.3d 1111, 1124 (Fed. Cir. 2001) ("[i]n the absence of a special definition of the term 'contact' in the specification, that term should be given its ordinary and accustomed meaning"). For the specification to override the ordinary meaning of this term, it must expressly demonstrate an intent to use an alternate definition (*see Kumar v. Ovonic Battery Co., Inc.*, 351 F.3d 1364, 1368

presumption that this ordinary meaning controls the construction of this term, Burst would have to have “unequivocally imparted a novel meaning to those terms.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). As discussed in Microsoft’s Opening Brief, Burst, to the contrary, acquiesced to the definition of “time compressed” in the Haskell patent. MS Br. at 25-27; Exhibit M, August 4, 1997 Preliminary Amendment at 8. Although Burst now argues, without explanation, that its construction “is entirely consistent with the actual claim language,” it never points to the “actual claim language” to which it is referring and ignores the ordinary meaning of that “actual claim language” in the intrinsic evidence. B Br. at 11. The record lacks any indication that the claims do not use “time compressed” in its ordinary sense, and Burst never provides any other ordinary meaning. See MS Br. at 29.⁸

Although Burst now seeks to cover all data compression, Burst expressly distinguished “ordinary data compression” from time compression when it was obtaining its patents from the Patent Office. See Ex. K, August 28, 1995 Amendment “C” at 6 (Appl. No. 07/976,542, abandoned) (“While Izeke et al. mentions data compression as one type of conversion process, this is not the equivalent by any means of applicant’s specifically claimed time compression.”); MS Br at 24. Burst cannot disavow its statements to the Patent Office now that they contradict its litigation position because the Patent Office record is intended to allow third parties to determine what falls within and what falls outside of the patent. *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1578 (Fed. Cir. 1995) (“A patentee may not proffer an interpretation for the purposes of litigation that would alter the indisputable public record consisting of the claims, the specification and the prosecution history, and treat the claims as a ‘nose of wax.’”). Thus, contrary to Burst’s efforts to ignore these statements (B Br. at 17-18), all comments to the

(Fed. Cir. 2003)), something that is impossible when the term does not even appear in the specification.

⁸ Burst argues that the intrinsic evidence in the form of several contemporaneous patents cited in the prosecution of Burst’s patents (which it misidentifies as extrinsic evidence) “cannot be arrived at as supporting the time compression/predetermined time period/time slot limitation unless one approaches the ‘995 patent with a preconceived notion that it must be read in the context of circuit-switched telephone lines and time division multiplexing.” B Br. at 19. To the contrary, these patents, as intrinsic evidence, define “time compressed” and therefore provide compelling evidence of that term’s meaning. See MS Br. at FN9, 27-28. Burst’s complaint is misdirected because “time compressed” must be construed as required by the intrinsic evidence, including the patents Microsoft has cited, and its scope determined by the resulting definition.

Patent Office are appropriate intrinsic evidence of the proper construction of claim term and thus bind an applicant. *See Jonsson v. Stanley Works*, 903 F.2d 812, 818 (Fed. Cir. 1990) (“the prosecution history of a patent contains ‘all express representations made by or on behalf of the applicant to the examiner to induce a patent grant’”) (citations omitted). Simply put, Burst distinguished ordinary data compression from time compression in the Patent Office and cannot now retract that distinction.

Ignoring the intrinsic evidence, Burst instead cites post-filing articles about its prototype systems and its expert’s naked opinion on the meaning of “time compressed representation.” Both approaches are legally impermissible. First, Burst’s articles about its prototype system are completely irrelevant to claim construction. *See* B Br. at 11, *citing* Exs. N and O. Patent claims are construed as of the date on which the priority patent was filed, in this case December 1988 (Burst’s articles are from 1991 and 1999). Even later changes in the meaning of a term (for which these articles provide no evidence) do not change the meaning of a patent claim. *Kopykake Enterprises, Inc. v. Lucks Co.*, 264 F.3d 1377, 1383 (Fed. Cir. 2001). No patent law doctrine says that patent claims should be construed based on what the patentee was doing eleven years after filing a patent application. In addition, these articles do not even use the disputed “time compressed” term, undercutting Burst’s proposed construction and demonstrating that this term cannot mean all faster than real time transmission. *See* Burst’s Exs. N and O.

Second, Burst’s reliance on its own expert’s unsupported opinion, also extrinsic evidence, is misplaced. Such opinion testimony cannot overcome the ordinary meaning shown in the intrinsic evidence, including the Haskell patent.⁹ “Extrinsic evidence [*e.g.*, expert testimony] is to be used for the court’s understanding of the patent, not for the purpose of varying or contradicting the terms of the claims.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 981 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996); *see also Vitronics Corp. v. Conceptronic Corp.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). “Where the patent documents are unambiguous, expert testimony

⁹ Note too that even if it was extrinsic evidence (which it is not), objective resources like the Haskell patent are much preferred to the raw expert testimony Burst offers. *See Texas Digital*, 308 F.3d at 1202-03 (“Dictionaries, encyclopedias and treatises, publicly available at the time the patent is issued, are objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art. Such references are unbiased reflections of common understanding not influenced by expert testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not

regarding the meaning of a claim is entitled to no weight.” *Texas Digital*, 308 F.3d at 1212, citing, *Vitronics*, 90 F.3d at 1584. Moreover, Burst cites its expert for the proposition that the term “time compression ‘appears in numerous engineering contexts’ and has ‘multiple meanings,’” see B Br. at 18, but fails to provide these supposed other meanings or their sources. Expert testimony must consist of more than mere unsupported assertions. *Arthur A. Collins, Inc. v. N. Telecom, Ltd.*, 216 F.3d 1042, 1047-48 (Fed. Cir. 2000).

Burst’s acquiescence that the meaning of “time compressed representation” is set forth in the Haskell patent while obtaining its patents dooms its *ex post* claim construction efforts. As a result, Burst fights hard to explain why this Court should ignore the Haskell patent and what Burst told the Patent Office about it:

(a) Burst asserts that the Haskell patent is “extrinsic” evidence, even though it was cited to the Patent Office and discussed with the Examiner. B Br. at 18. Because it is cited art, however, the Haskell patent is intrinsic evidence. See *Kumar*, 351 F.3d at 1368 (Fed. Cir. 2003).

(b) Burst next tries to dissuade the Court from considering its statements about Haskell by accusing Microsoft of “latching on to a passing reference cited in the prosecution history” (B Br at 13) and asserting that “it can hardly be considered part of the prosecution history beyond one mere passing and distinguishing remark directed to other factors.” B Br. at 19. Burst’s argument is inconsistent with the law. The Haskell patent is intrinsic evidence and cannot be ignored. See *Kumar*, 351 F.3d at 1368.

(c) Burst tries to dissuade the Court from considering the Haskell patent on the basis that “Burst came to no agreement with the Examiner, in the context of Haskell, that time compression is not regular compression.” B Br. at 17. That is entirely irrelevant. All representations to the Patent Office are appropriate intrinsic evidence of the proper construction of a claim term, even if no agreement is reached. See *Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994-95 (Fed. Cir. 2003); *Laitram Corp. v. Morehouse Indus., Inc.*, 143 F.3d 1456, 1462 (Fed. Cir. 1998). Here, Burst acknowledged that time compression differs from ordinary compression, and the Court and third parties are entitled to rely on

inspired by litigation.”).

that acknowledgement. Burst cannot now retract its acknowledgement simply because it leads to an inconvenient result. *See Springs Window Fashions*, 323 F.3d at 995; *Jonsson*, 903 F.2d at 818. Nor is whether Burst distinguished time compression from regular compression “in the context of Haskell” important – all definitional statements to the Patent Office bind Burst. *See Jonsson*, 903 F.2d at 818.

(d) Nor does it matter whether the Haskell patent was ever the basis for a rejection, as Burst asserts. B Br. at 17.¹⁰ Any statement to the Patent Office is intrinsic evidence that helps define claim terms; it is not necessary that the statement be in response to a rejection. *See Laitram*, 143 F.3d at 1462; *Jonsson*, 903 F.2d at 818; *Ekchian v. Home Depot, Inc.*, 104 F.3d 1299, 1303–04 (Fed. Cir. 1997) (in considering statements in an IDS, finding that the basis for claim interpretation need not be a rejection). Simply put, when presented with the opportunity to explain to the Examiner that its claimed “time compressed representation” meant something different than in the Haskell patent, Burst declined and acknowledged that Haskell described “time compression.” Ex. M, August 4, 1997 Preliminary Amendment at 8; *Omega Eng’g*, 334 F.3d at 1323.

(e) Burst’s also misleadingly states that “Haskell was merely identified by BURST, along with other art, in an Information Disclose Statement [IDS] filed August 6, 1996.” B Br. at 17. To the contrary, as discussed above, Burst also discussed Haskell in the Remarks section of one of its amendments to the Patent Office and acknowledged that Haskell disclosed time compression. *See Exhibit M*, August 4, 1997 Preliminary Amendment at 8.

(f) Burst justifies ignoring the Haskell patent by reference to its expert’s report (B Br. at 18), although Burst’s expert provides no reason that the definition of “time compressed” in Haskell does not control. Indeed, in his deposition, Burst’s expert admitted ignoring the definitional evidence in the Haskell patent, saying there was no need to consider it because he had already made up his mind about the proper construction of this term using the specification – which neither uses nor defines “time

¹⁰ As intrinsic evidence, the Haskell patent would provide a definition of “time compressed” even if Burst and the Examiner had never discussed it. *Kumar*, 351 F.3d at 1368.

compress.” Ex. E, Stevenson Dep. at 25-26.¹¹ Beyond its expert’s naked statements, Burst lacks even a single piece of evidence to support its construction.

Burst, of course, has good reason to run from the Haskell patent and its statements about that patent: Haskell defines “time compression” exactly as Microsoft does, utterly undercutting Burst’s proposed construction. So, although Burst argues that the Haskell patent’s discussion of “a form of time compression ... has no relevance to the Asserted Patents” (B Br. at 13), there can be no question that a definition of (1) the exact claim term at issue (2) in the intrinsic evidence (3) that the applicant acknowledged is relevant – and decisive. Burst may wish it drafted its claims differently or said different things to the Patent Office, but the law is clear that what it said to the Patent Office matters and third parties, like Microsoft, are entitled to rely upon it. *See Springs Window*, 323 F.3d at 995; *Exxon Chemical Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1562 (Fed. Cir. 1995) (concurring opinion).

Burst also tries to avoid this claim construction evidence by focusing on the natural result of the proper construction of its claims – and improperly attempting to construe the claims based on Microsoft’s accused software. *See Jurgens*, 927 F.2d at 1560. Thus, even though Burst acknowledges that the specification discloses fixed bandwidth lines, it professes surprise that construing its claim terms leads to a result that limits its claims to such lines, arguing that “the Asserted Patents are not limited to circuit-switching networks or any other particular type of network environment.” B Br. at 15. Burst is wrong in two respects. First, the system claimed in the Burst patents would not, contrary to Burst’s unsupported assertion, work over undisclosed communications networks. The patents describe a “VCR-ET,” an enhanced consumer electronics product. They do not disclose the Internet, packet switched networks, packets, a personal computer, or any of the other features of Microsoft’s software that Burst now asserts fall within its patents. Not surprisingly, the system claimed in Burst’s patents would need to be substantially redesigned to work over the Internet. Ex. D, Von Herzen Decl., ¶ 20. Second, while it is true that the claims do not identify particular networks, if the proper construction of the claim language

¹¹ In his deposition, Burst’s expert stubbornly denied that any reference in the intrinsic record to “time compress” was pertinent, repeatedly referring back to the specification which does not contain that term. Ex. E, Stevenson Dep. at 57-59.

restricts them to certain network types, the claims are indeed so limited.¹² *See Johnson & Johnston*, 285 F.3d at 1052. Burst claimed a “time compressed representation” and must accept the restrictions that follow from its use of that term.

B. “Audio/Video Transceiver”

Microsoft construes the claim term “audio/video transceiver” by starting with the claim language, determining its ordinary meaning, and then confirming that meaning in the specification. *See Texas Digital*, 308 F.3d at 1204-05. Burst used the term “transceiver” in its claims, putting third parties on notice that its claims reach only a “transceiver.” Burst cannot now extend its claim to cover something else.

In its eagerness to assert ownership over Internet transmission of audio/video using personal computers, however, Burst offers a construction of the term “transceiver” that would cover different pieces of software running on different computers located in different places – even in different buildings. Indeed, Burst apparently asserts that its patent covers software solutions where content is received in one location, compressed in another location, and transmitted across the Internet from a third location. Such a system clearly does not describe a single “transceiver.” But Burst contends otherwise,

¹² Although Burst claims that “Dr. Von Herzen myopically focuses on the telephone line” (B Br. at 13), Dr. Von Herzen provided his understanding of the meaning of this claim term, the file history, and the cited art. He only noted that his understanding was consistent with the specification, and discussed all the communications media disclosed therein, including fiber optic telephone lines and regular telephone lines. Restricting Burst’s claims to fixed bandwidth connections, however, is a result of the ordinary meaning of the term Burst chose to use in its patents because time compression is only possible with fixed bandwidth lines. *See* Ex. D, Von Herzen Decl., ¶ 32. The patent, consistent with Microsoft’s interpretation, discloses only fixed bandwidth lines, a fact that Dr. Von Herzen noted. *See Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 347 F.3d 1367, 1371 (Fed. Cir. 2003) (“claims must be construed so as to be consistent with the specification”).

Burst also attacks Microsoft’s expert, Dr. Von Herzen, contending that he “waffled” and “expressly and repeatedly contradicted the previous statements in his expert report.” B Br. at 15. Dr. Von Herzen testified consistent with his expert report. Burst simply refuses to understand the relevant technology in the telephone system and the different pieces comprising it. Burst, for example, equates the “local loop” with a “telephone line.” B Br. at 16. But, as Dr. Von Herzen patiently explained in his deposition, the local loop is a just wire from a house to the central office. *See* Ex. Y, Deposition of Brian Von Herzen (“Von Herzen Dep.”), dated December 18, 2003, at 70-71. As an unshared wire, it is neither circuit switched or time division multiplexing because only one party uses it and it stretches the entire way from the home to the central office. *See* Ex. Y, Von Herzen Dep. at 76, 93-94, 111. The local loop is just one part of a telephone line connection, called POTS, through the telephone network – a network that unquestionably uses circuit switching and time division multiplexing. *See* Ex. Y, Von Herzen Dep. 70-71, 79-80, 92; B Br at 16. Burst’s supposed “gotcha” of Dr. Von Herzen lacks any basis in fact and, moreover, is simply irrelevant to the proper construction of “time compressed representation.”

claiming that such a system would still be a single “transceiver.” Such a result is inconsistent with the ordinary meaning of transceiver and how it is used in the specification. *See* MS Br. at 48-50.

Microsoft is not reading a feature disclosed in the specification as a limitation on the claims. Rather, the claims are limited because of an explicit term – transceiver – found in the claims. The specification only confirms this reading. As discussed in Microsoft’s Opening Brief, the specification uses the term “transceiver” consistent with its ordinary meaning to describe the embodiment with all its components in a common housing. MS Br. at 47-49. The specification, on the other hand, never uses the word “transceiver” to describe an embodiment with components in different housings and locations. *See, e.g.,* Ex. B, ‘705 patent, col. 10, line 52 – col. 11, line 20.

Burst argues that there is no technical reason that all the claimed components would need to be in the same housing. B Br. at 23-24. This point is irrelevant. Burst’s claims use the term “transceiver,” the specification describes such a system, and Burst’s ownership rights are limited to what it claimed, even if a system could be built in another way. Moreover, there are technological advantages to putting all the components in a common housing, as Burst’s expert acknowledged. Ex. E, Stevenson Dep. at 187-193.

Burst weakly attempts to contradict Microsoft’s evidence of ordinary meaning by citing to Dr. Stevenson’s claim that when he heard the term “transceiver” he “never had any thought that [the transceiver] was going to be – someone was going to say it was in a single housing.” B Br. at 23, *citing*, Stevenson Dep. at 186. In addition to lacking any support in the record, Dr. Stevenson’s statement is simply incredible on its face because the patents-in-suit use the term “transceiver” and expressly describe all the components being “in a common housing.” Ex. A, col. 3, line 36-37. Burst’s use of Dr. Stevenson’s statement evokes the preference in *Texas Digital* for objective resources – like the IEEE Dictionary¹³ – which “are unbiased reflections of common understanding not influenced by expert

¹³ Burst offers a number of supposed distinctions between its patents and the IEEE definition cited by Microsoft. B Br. at 24. Burst, however, never explains why any of these distinctions matter or offers any evidence to support them.

testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not inspired by litigation.” *Texas Digital*, 308 F.3d at 1203.¹⁴

C. Burst’s Means Plus Function Claim Elements

Each and every apparatus claim that Burst asserts includes one or more elements drafted as a “means for” performing a certain function without delimiting physical structure. Each and every one of these apparatus claim elements is presumed to invoke the protection against invalidity that Section 112, ¶ 6 accords. *See Kemco Sales, Inc. v. Control Papers Co., Inc.*, 208 F.3d 1352, 1361 (Fed. Cir. 2000) (“use of the term ‘means’ in a claim limitation creates a presumption that section 112, paragraph 6 has been invoked”) And, accordingly, each such element “shall be construed to cover the corresponding structure ... described in the specification and equivalents thereof.” 35 U.S.C. 112, ¶ 6.

For each such “means” claim element, Burst’s chosen form poses two issues for the Court:

(1) has Burst overcome the presumption that the element is to be construed pursuant to Section 112, ¶6? and (2) if not, what specific structures are described in the specification as performing the recited function? *See Kemco*, 208 F. 3d at 1361. Although it may be a tedious undertaking, determining which elements are subject to Section 112, ¶ 6 and identifying the specific structures described in the specification that correspond to each recited function is a duty for the Court during claim construction. *See Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc.*, 145 F.3d 1303, 1308 (Fed. Cir. 1998). That determination is necessary to any infringement assessment because when a patentee has invoked the protection provided by Section 112, ¶ 6, the accused device must be compared to the disclosed structure – not just to the recited function. *Id.* at 1309.

The very purpose of Section 112, ¶ 6 of the Patent Statute demonstrates the correctness of Microsoft’s, and the inadequacy of Burst’s, position on these claim elements. As announced in *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1 (1946), claims that recite an element simply as some “means for” performing a certain function are invalid as indefinite, vague, and overbroad. *Id.* at 12. Congress amended this result with the 1952 Patent Act to expressly allow “means plus function” claim

¹⁴ Microsoft does not believe it is disputed, but nonetheless, transceiver should also be construed to be an apparatus that

language that does not recite specific structure. But Congress required the patent to describe adequately the structure for performing the function recited in the claim, and Congress directed courts to construe the functional claim language to cover only the corresponding structure described in the specification and equivalents thereof. 35 U.S.C. §112, ¶ 6. This limitation to the specification is the “string” attached to using broad, functional language instead of reciting definitive structure in combination claims. *Valmont Industries, Inc. v Reinke Mfg. Co, Inc.*, 983 F. 2d 1039, 1042 (Fed. Cir. 1993). In fact, although it might appear at first reading that “means plus” claim elements are quite broad in scope, this claiming technique actually serves to cut back the scope of the patent claim. *Jonsson*, 903 F. 2d at 819.

Having chosen to use the term “means” in its apparatus claims, Burst bears the burden of showing that the claim language actually does recite sufficiently definitive structure to perform the claimed function. *Kemco*, 208 F.3d at 1361. Burst, however, makes no effort to make such a showing. To the contrary, Burst relies solely upon the introductory term preceding “means” in each claim element in dispute – *e.g.*, “input,” “compression.” Burst then invokes the *Kimberly-Clark* case that found that a “perforation means” was not subject to Section 112, ¶ 6 because a “perforation” was well-known to be a specific structure. *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524 (Fed. Cir. 1996). The claims here, however, differ materially from those at issue in the *Kimberly-Clark* case. By way of example, the “compression means,” “decompression means,” and “editing means” illustrate the fallacy of Burst’s position and its case law citation because there is no such thing as a “compression,” a “decompression,” or an “editing.” Compare *Kemco*, 208 F.3d at 1361 (“plastic envelope closing means” does not recite definitive structure). Burst never even attempts to show that any of the introductory terms for the disputed “means plus” elements refers to definitive structure as the “perforation” did in *Kimberly-Clark*.

Moreover, Burst’s proffered construction of each of these disputed elements shows just how unfounded its efforts to avoid Section 112, ¶ 6 are. The “compression means” is again illustrative. Burst asks the Court to construe this as “a device configured to reduce” and “compressing” as “reducing.” Thus, Burst asks the Court to conclude that “compression means ... for compressing” is any device

can both transmit and receive “audio/video” data.

configured to reduce. This “construction” says that any device that compresses meets this claim element – exactly the tautological result that Section 112, ¶ 6 was intended to prevent and what the Supreme Court explained in the *Halliburton* case is indefinite.

Microsoft’s opening brief marched through the disputed apparatus claim elements and listed the specific structures that the patent specifications describe as performing the recited functions. MS Br. at 34-44. There is no need to repeat that discussion here. However, in its opening brief, Burst includes citations that refer to elements and portions of the patent specifications as corresponding to each disputed claim element in an attempt to hedge its bets on whether the Court will correctly find that Section 112, ¶ 6 applies. But Burst errs often by incorporating references to large blocks of the patent specification for individual claim elements. This leaves the Court and Microsoft without a clear delineation of Burst’s proposed construction of these elements and thus their scope. *See Sulzer Textil*, 351 F.3d at 1129 (proper claim construction must clearly delineate the “meaning and scope of patent claim terms”). Moreover, the quid pro quo of section 112, ¶ 6 is that the patentee bears a duty to link in the patent specific structure to each function later recited in the patent claims. *See B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). Accordingly, the corresponding structure identified in the claim construction process is limited to those physical structures in the specification that actually perform the recited function. *See id.* The corresponding structure is not the specification as a whole, nor does it encompass disclosed structure that might have been able to – but did not – perform the claimed function. *See id.*

The following sections address the most grievous instances of such errors in Burst’s alternative proposals, as well as a few other similar errors in Burst’s proffered structure listings.

1. “Input Means”

As with all of the Burst apparatus claim elements, the “input means” is presumed to be written in “means plus function” form. Burst provides no evidence to overcome this presumption. *See B Br.* at 24-25. Furthermore, in its alternative construction, Burst provides only an incomplete Section 112, ¶ 6 analysis because it does not clearly indicate which structures correspond to this means element. *See B*

Br. at 25. Instead, it merely lists a few structures and cites to its infringement claim charts and Dr. Stevenson's expert reports. But those reports list no structures and instead refer back to the same claim charts. The claim charts simply quote the specification, again without identifying which structures mentioned in the quotations correspond to this claim element, which must be used together, and which are alternate structures. Thus, even when Burst acknowledges that Section 112, ¶ 6 may apply, it navigates an empty circle without identifying the definitive structure in the specification that performs the claimed function. That is legally inadequate. The statute requires definitive structure to be used to compare to the accused structure that allegedly performs the claimed function. *Medical Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003).

Moreover, Burst's limited list of structures is inconsistent with its own quotations in its brief and its expert's report. For example, the mechanical selector switch is part of the structure corresponding to the "input means." See B Br. at 25; Ex. E, Stevenson Dep. at 214-15. In its claim charts showing the alleged infringement, Burst identified the "selector switch" as part of the necessary corresponding structure. Ex. Z, '995 patent claim charts at 5. The patents show switches operated by buttons on the front of the VCR-ET. Ex. A, '995 patent, Figs. 1, 2, col. 7, lines 29-31, 41-44, col. 8, lines 3-5. The specification describes this switches as having an "OFF or open" position. col. 8, lines 4-5. Figure 2 also shows the switches as links that open and close. Thus, it is indisputable that the "input means" requires a structure that includes a mechanical selector switch, and the Court should so find.

2. "Compression Means" – The '995 Patent

As Microsoft showed in its opening brief, the "compression means" in the '995 patent corresponds to an AMD 7971 hardware compression chip and its equivalents – *i.e.*, this element is only satisfied by such a chip or its equivalent. MS Br. at 37.

Burst never provides any evidence that a "compression" is sufficiently definite structure to overcome the presumption that this element is written in "means plus" form. Then, as part of its fall-back position if the Court finds that the statute does apply, Burst identifies certain structures as allegedly corresponding to this element many of which are not described as performing the claimed function:

(1) Burst asserts that the “compression means” element is satisfied by a microprocessor, such as those used by personal computers. This is wrong. Although the specification describes microprocessors being used for other purposes, it never links a microprocessor to the compressing function – *i.e.*, it never describes the microprocessor as performing that function. *See* Ex. D, Von Herzen Decl., ¶ 38; *Braun*, 124 F.3d at 1424.

Burst relies on its expert’s statement that the microprocessor in the specification *is involved in* the compression process to connect the CPU, or microprocessor, to the compression process. *See* B Br. at 33; Ex. E, Stevenson Dep. at 229-30. At most, this means that the CPU is part of the same block as the AMD 7971 compression chip and that the compression process would not work without the CPU acting as a controller. *See* Ex. E, Stevenson Dep. at 229-30. But that is irrelevant.

The CPU undisputedly controls the AMD 7971 compression chip. But the function claimed for the “compression means” is “compressing,” not controlling the chip that does the compressing. *See* Ex. D, Von Herzen Decl., ¶ 38; ‘995 patent, col. 5, lines 46-49 (“The CPU (Central Processing Unit) 28 is a microprocessor which controls the digitization process of VCU 12. CPU 28 works with controller 27 to control and communicate with the other elements of the VCU.”). In fact, the ‘995 patent itself distinguishes between the compressing function and the controlling function. Unasserted claim 60, for example, includes separate claim elements for a “compressor/decompressor means for compressing” and a “central processing unit means for controlling operation of said compressor/decompressor means.” col. 18, lines 11-29. In sum, the patent itself clearly distinguishes between the controlling function and the compressing function; the microprocessor performs the former function, but not the latter.

Burst thus makes the argument rejected by the Federal Circuit in *Medical Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d at 1211 (“the duty of a patentee to clearly link or associate structure with the claimed function is the quid pro quo for allowing the patentee to express the claim in terms of function under section 112, paragraph 6”) (emphasis added). Because the described

microprocessors do not perform the claimed compressing function, they cannot as a matter of law correspond to this means plus function claim element. *Braun*, 124 F.3d at 1424.¹⁵

(2) Burst also asserts that the “compressor/decompressor 26” mentioned in the specification corresponds to the “compression means.” B Br. at 33. The “compressor/decompressor,” however, cannot be a corresponding structure because it is not itself structure but only a reference to the AMD 7971 hardware compression chip. col. 5, lines 4-6 (“One example of an appropriate compression/decompression circuit on a single integrated circuit is the AMD (Advanced Micro Devices) 7971.”). Unlike the “core logic” discussed in *Intel Corp. v. VIA Technologies, Inc.*, 319 F.3d 1357, 1366-67 (Fed. Cir. 2003), which the court recognized as hardware circuitry, the “compressor/decompressor” describes a function and refers specifically to the AMD 7971. Similarly, a “compressor/decompressor” is not a like the “selector” in *S3 Inc. v. nVIDIA Corp.*, 259 F.3d 1364 (Fed. Cir. 2001), because the Federal Circuit found in that case that “[t]he uncontradicted evidence was that a selector is of well known electronic structure and performs a common electronic function, and is readily implemented from the description in the specification.” *Id.* at 1371. There is no such evidence about the “compressor/decompressor” in this case. Rather, this case is like *Medical Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d at 1212-13, where the Federal Circuit found that a “Image Format Conversion” box on a figure did not disclose software as a “means for converting.”

(3) Burst also argues that the portions of the specification mentioning a “compression algorithm” disclose structure corresponding to the “compression means.” B Br. at 33. Burst’s expert testified that the algorithm could be implemented in software. Ex. E, Stevenson Dep. at 227. This argument is misplaced, however, because “means plus function” elements are limited to those portions of the disclosed structure that actually perform the recited function – not to whatever an expert could, in

¹⁵ Similarly, Dr. Stevenson’s testimony that the compression process would stop without the CPU acting as a controller does not demonstrate that the CPU performs the claimed “compressing” function. Taking away virtually any part of the system would likely stop the compression process, even if that part is not actually performing the compression. (Unplugging the system would also stop the compression process, but no one would seriously argue that the electrical plug is performing the compression.) The structure corresponding to a means element is the structure that performs the claimed function, not other structures that perform other functions but somehow interact with the corresponding structure. See *Cardiac Pacemakers, Inc. v. St. Jude Medical Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002) (“It remains true, of course, that corresponding structure need not include all things necessary to enable the claimed invention to work.”).

hindsight, use to redesign the disclosed system. *See Med. Instrumentation*, 344 F.3d at 1212, *citing*, *Omega Eng'g*, 334 F.3d at 1331-32.

Moreover, Burst's specification discloses hardware compression only; there is simply no mention of software compression. Ex. D, Von Herzen Decl., ¶ 37 Implementing these algorithms in software cannot be corresponding structure because the patent is silent on software compression. *See Braun*, 124 F.3d at 1424. Furthermore, software could not have performed the compression in the patent when these patents were filed in 1988 and therefore it is impossible for the patent to have disclosed software as corresponding structure for the compression means.¹⁶ *See* Ex. D, Von Herzen Decl., ¶ 37; Ex. I, Luther, *You are there ... and in control*, IEEE Spectrum (September 1988); MS Br. at 39. For purposes of construing this claim element, the complete absence of any mention in the patent of software solutions for compression is determinative. *See Med. Instrumentation*, 344 F.3d at 1212-13 (an "Image Format Conversion" box on a figure did not disclose software as a "means for converting"). It would be plain error to conclude that software or naked algorithms are structures corresponding to the "compression means" of the '995 patent.

3. "Compression Means" – The '705 Patent

Burst admits that it removed from the '705 patent the only structure disclosed in the '995 patent for "compressing." B Br at 45. Although Burst then claims that "the '705 patent specification still refers to numerous compression techniques and structures," it fails to identify any structures disclosed as performing compression – citing only "standard data compression" and "various algorithms that reduce the number of digits in a representation such as CCITT Group IV" and "intraframe [sic: interframe] encoding." *Id.*

"[S]tandard data compression," however, cannot be a structure corresponding to the "compression means" element of the '705 patent. At most, it just repeats the claimed function without

¹⁶ The patents-in-suit describe using a memory to hold only a few frames of the uncompressed video, which the patent explains arrives at 30 frames/second. col. 4, lines 48-54. Because this memory lacks space for additional video frames, the compression process must remove the frames from this memory at the same rate they are stored in the memory and thus must compress at the same rate the data is received (i.e., in real time). Software in 1988 could not compress this fast. *See* Ex. D, Von Herzen Decl., ¶ 37.

providing any structure. *See Med. Instrumentation*, 344 F.3d at 1212. Moreover, general, broad statements cannot support additional scope to “means plus” elements. *See Fonar Corp. v. General Electric Co.*, 107 F.3d 1543, 1551-52 (Fed. Cir. 1997).

A “compression technique” – such as the “algorithms” Burst mentions – is also not structure. Means plus function elements claim structure, not techniques. A technique or, in this case, an algorithm, is not by itself corresponding structure. To correspond to a means element, an algorithm must be paired with some structure. *Cf. WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999) (holding that a general purpose processor and an algorithm together were corresponding structure). The ‘705 patent does not disclose what structure would perform these algorithms because as Burst admits, it removed the only such structure when it filed its continuation-in-part application.

As discussed in Microsoft’s Opening Brief, the “compression means” in the ‘705 patent corresponds to no structure. However, if the Court prefers, the “compression means” could be said to correspond to the non-specific “compressor/decompressor,” which would be limited to a hardware compression chip. *See MS Br.* at 38-39.

4. “Output Means”

As with the other apparatus claim elements, Burst again fails to overcome the presumption that “output means” is in “means plus function” form as it provides no evidence that the element itself recites sufficiently definite structure. B Br. at 27-28. Further, Burst’s construction for “output means” under Section 112, ¶ 6 is flawed.

Just as it did with “input means,” “compression means,” and every other means element, Burst identifies numerous structures that not only do not perform the claimed function, but often have no relation whatsoever to that function. *See Braun*, 124 F.3d at 1424. For example, Burst claims that a “modem” and “telephone line” are corresponding structure for the output means. B Br. at 28. But the “output means” must transmit the “time compressed representation” faster than the real time play back time of the data. The specification expressly states that the modem/telephone combination cannot do this. Ex. A, ‘995 patent, col. 8, lines 50-57 (“the data transmission rate on telephone lines is much slower than

the transmission rate for an optical fiber. Accordingly, the time required to communicate a video program may exceed the time it takes to view the program.”). Thus, not only is the proffered structure not clearly linked to the function, *see Med. Instrumentation*, 344 F.3d at 1211, these structures are expressly disclosed as incapable of performing the claimed function. *See Ballard Med. Prods. v. Allegiance Healthcare Corp.*, 268 F.3d 1352, 1359 (Fed. Cir. 2001).

Similarly, Burst mentions a “video output line as a standard STCS composite signal” and an “RF modulator.” B Br. at 28. The specification does not describe either of these components as performing the claimed function of transmitting data faster than real time. Nor are these structures described in the specification as transmitting compressed data. In fact, “STCS” is described as standing for “standard television composite signal,” which is neither compressed nor transmitted faster than real time. These structures are used to obtain the non-compressed source audio/video. They therefore cannot be corresponding structure.

This is also true of the “high-speed data bus” Burst discusses. *See* B Br. at 28. This “bus” does not perform the claimed function as it does not transmit the data away from the “transceiver.”

5. “Transmission Means”

Burst commits the same errors and omissions in its proposed construction of “transmission means.” Burst includes as corresponding structure for this element a “optical fiber,” “a fiber optic port and fiber optic telephone line,” “an output line,” “an RF modulator,” “a modem,” “a telephone line,” and “a microwave.” B Br. at 46. But, again, Section 112, ¶ 6 limits means plus function elements to structure disclosed as performing the function, not any structure “capable of ‘transmitting [a] digital time compressed representation’ as Burst asserts. *See Braun*, 124 F.3d at 1424.

This element’s function is “transmitting said digital time compressed representation of said audio/video source information away from said audio/video transceiver apparatus in said burst transmission time period,” where the “burst transmission time period” is the faster than real time transmission time. The specification never discloses that the “RF modulator” or “telephone line” and modem could send faster than real time data. Indeed, Burst’s expert apparently agrees, not listing the RF

modulator as supposedly corresponding structure and agreeing that the modem was not described as sending faster than real time data. *See* Ex. E, Stevenson Dep. at 259. Burst thus lacks any evidence that the specification describes these structures as performing the claimed function. *Braun*, 124 F.3d at 1424.

Burst's claim that an "output line" is corresponding structure also fails. B Br. at 46. This proposed structure is meaningless, as it effectively describes nothing more than the function of outputting. A means element cannot correspond to general functional disclosures. *See Fonar*, 107 F.3d at 1551-52.

Burst also ignores the fact that a mechanical switch 37 must be part of the structure corresponding to this means element, even though Burst previously included it in its infringement claim charts – charts that Burst's expert incorporated into his expert report. In those claim charts, Burst identified switch 37 as a structure corresponding to the "transmission means": "Switch 37 is provided to select connection to the fiber optic input/output port 18 ... The selected signal is delivered to or supplied from high speed data bus 34." Ex. AA, '705 patent claim charts at 16. Similarly, Burst's expert acknowledged that this means element corresponds to the same structure as the "output means," which he acknowledged included the switch. *See* B Br. at 28.

6. "Recording Means"

As with the other apparatus claim elements, Burst again fails to provide any evidence to overcome the presumption that "recording means" is subject to Section 112, ¶ 6. B Br at 34. Burst also fails to identify corresponding structure with any specificity. Nonetheless, Microsoft agrees that some of the structure Burst identifies, the optical disk and magnetic tape, are corresponding structure. There is more, however, as this claim element also corresponds to the mechanical shunt switch 48'. *See* Ex. D, Von Herzen Decl., ¶ 47; Ex. E, Stevenson Dep. at 275-77. This switch is necessary to perform the claimed function because, as the claim language states, it "couple[s] [the recording means] to said random access storage means."

7. “Editing Means”

The “editing means” element contains two disputed claim construction issues: (1) whether the “editing means” is in “means plus function” form and the corresponding structure and (2) what is the function performed by this element. Burst briefly discusses the first but ignores the second.

As discussed with regard to Burst’s other claim elements, Burst fails to offer any evidence that an “editing” is sufficiently definite structure to satisfy its burden to overcome the presumption that this element is in means plus function form. Burst’s “alternate” Section 112, ¶ 6 argument also fails to satisfy its burden as the patentee to identify the structure corresponding to this means element. *See Med. Instrumentation*, 311 F.3d at 1211. Burst identifies numerous structures in its Brief and in the other documents it identifies (B Br. at 30), but it is impossible to tell whether Burst considers these structures necessary to performing the claimed function or alternative structures, or if it just lists them for some other reason. For example, is a “light pen” or “control panel” necessary to satisfy this claim element? *See B Br at 30*. Burst provides no record for Microsoft to evaluate the allegedly corresponding structures.

With regard to the claimed function, Burst provides no analysis at all, even though, based on its infringement allegations, whether a playlist can be “editing” is at the heart of the parties’ dispute. Burst, nonetheless, cites the Microsoft Computer Dictionary to define “edit.” B Br. at 29. Ironically, this definition undercuts Burst attempt to have this element reach playlists, as it gives no indication that a playlist involves editing. *See MS Br. at 55*. Editing should be given its plain meaning. *See Id.*

8. Other “Means” Elements

As explained above, Burst has made no meaningful effort to show that any of the apparatus claim elements drafted in “means plus” form recites sufficiently definitive structure to avoid Section 112, ¶ 6. Microsoft has addressed certain claim elements above to the extent that they merit special comment or that Burst’s proffered positions include additional errors of law or fact. Burst’s positions on the remaining means elements suffer the global infirmities detailed above, but warrant no further discussion. For each of these, Microsoft’s listing of corresponding structure satisfies the requirements of precision the statute demands and should be adopted.

D. “A Burst Transmission Time Period That Is Substantially Shorter Than A Time Period Associated With Real Time Viewing By A Receiver Of Said Audio/Video Source Information”

In its Opening Brief, Microsoft explained how the intrinsic evidence defines the “substantially shorter” transmission time to be 1% or less of the real time play time. MS Br. at 44-45. Burst, on the other hand, ignores the intrinsic evidence and asks that the Court construe this claim language in such general terms that claim construction is effectively left to the jury.

Ultimately, the construction of this claim element must tell the jury what is within the claim and what is outside of it. *See Sulzer Textil*, 351 F.3d at 1129. Burst proposes that “substantially shorter” be rewritten as “significantly or considerably shorter.” B Br. at 44. This hardly represents a step forward. For example, is, as Burst’s expert testified, 58 minutes “substantially shorter” than 60 minutes? *See Ex. E, Stevenson Dep.* at 198.¹⁷ Burst’s proposed construction would result in the jury being asked to decide what “significantly or considerably” means instead of what “substantially” means. But now is the time for resolving the meaning of this claim, a task not to be given to the jury. *See Sulzer Textil*, 351 F.3d at 1129 (“This means that, as to claim coverage, the district court must instruct the jury on the meanings to be attributed to all disputed terms used in the claims in suit so that the jury will be able to ‘intelligently determine the questions presented.’”).

Contrary to Burst’s portrayal of its position, Microsoft does not seek an exact numeric value for “substantially shorter.” *See B Br.* at 44-45. Rather, Microsoft seeks only to give that term a meaning that a jury can understand. The intrinsic evidence reveals a range of values – 1% or less – that represent a “substantially shorter” transmission time. Microsoft urges only that the Court construe the claims consistent with this intrinsic evidence. *See Johns Hopkins University v. CellPro, Inc.*, 152 F.3d 1342, 1356 (Fed. Cir. 1998).

Burst, nonetheless, argues that “[s]uch terms of approximation are commonly used by patent practitioners to avoid absolute values, limits and ranges” but fails to cite any legal support. B Br. at 44. In Burst’s claims, however, “substantially” is not used for approximation, like the terms “about” or

¹⁷ Such a reading of Burst’s claims raises issues of double patenting because many of the claims of the ‘705 patent would

“mostly.” “About shorter” or “mostly shorter” makes no sense at all. “Substantially” is used to represent magnitude, and Burst appears to agree, proposing a construction of “significantly or considerably.” Ex. D, Von Herzen Decl, ¶ 48; B Br. at 44. Burst’s argument, unsupported by any law, is that its claims have unlimited and undefined scope because it chose the word “substantially.” This is simply not the law – multitudes of cases have interpreted claim language to give it definable meaning. See e.g., *Johns Hopkins University*, 152 F.3d at 1356 (“substantially free” construed to mean no more than 10%); *Intellectual Property Development, Inc. v. UA-Columbia Cablevision of Westchester, Inc.*, 336 F.3d 1308, 1314 (Fed. Cir. 2003) (“high frequency” construed to mean in the range of 3-30 MHz); *Oakley, Inc. v. Sunglass Hut Int’l*, 316 F.3d 1331, 1341 (Fed. Cir. 2003) (“vivid colored appearance” construed to mean a differential effect somewhere between 2.3% and 5.45%).

In the face of Microsoft’s interpretation of this claim term using the intrinsic evidence, Burst offers only invective attacks (“fuzzy math,” “falsely representing”) to support its interpretation of this claim term. Yet Burst admits it failed to define “substantially shorter” in the specification. B Br. at 43. And Burst does not contend that Microsoft incorrectly calculated the only example given in the specification. See Stevenson Dep. at 316. At most, Burst takes issue with Microsoft’s citation to a summary of the invention allegedly seven years before the ‘705 patent was filed. See B Br. at 44. This criticism, however, ignores long-established law that later filed patents incorporate the file history from their related predecessors, even if a number of years has passed. See *Masco Corp. v. United States*, 303 F.3d 1316, 1324 (Fed. Cir. 2002) (“The prosecution history of a parent application may be considered in construing claim terms.”).

In sum, Burst offers no valid reason to substitute “significantly or considerably” for “substantially” in the claims or to reject Microsoft’s proffered construction that is admittedly consistent with the specification.

not be patentably different from those of the ‘995 and ‘839 patent. See e.g. ‘839 patent, claim 77; ‘705 patent 21.

E. Fiber Optic Input/Output Port

Burst construes the “fiber optic input” and “fiber optic output” ports to be a “device configured to receive via optical fibers” and “device configured to transmit via optical fibers,” respectively. B Br. at 25, 29. This definition ignores the claim term “port” and reads these elements as if they were their own device rather than part of the claimed “transceiver.”

Consistent with the idea that a port is part of a device rather than a device itself, the IEEE Dictionary defines a “port” as “[a] place of access to a device or network where energy may be supplied or withdrawn or where the device or network variables may be observed or measured.” Ex. BB, The IEEE Standard Dictionary of Electrical and Electronics Terms, 6th Edition, IEEE Press (1996).

Thus, the “fiber optic input port” and “fiber optic output port” should be construed to mean the place of access to the transceiver device for the optical fibers.

F. “A Multiplicity Of Video Frames Collectively Representing At Least One Full Motion Video Program”

In its arguments about a “full motion video program,” Burst sets up and then knocks down a strawman – that Microsoft is interpreting “full motion video” to require a full program. B Br. at 41-42. There is no question that Burst’s claims are limited to “full motion video” – which the specification defines as 30 frames per second. *See* Ex. A, ‘995 patent, col. 4, lines 48-54; B Br. at 42. The real dispute between the parties is whether other language in the claims – “at least one ... program” – describes one or more complete video programs.

Claim construction requires interpreting the full claim language, which shows that the claims describe using one or more programs, not a portion of a program. *See Brookhill-Wilk*, 334 F.3d at 1299 (Fed. Cir. 2003) (“While certain terms may be at the center of the claim construction debate, the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms.”). The claims state that “said audio/video source information compris[e] a multiplicity of video frames collectively representing at least one full motion video program.” *See* MS Br. at 53. “At least one” video program must mean one or more such programs.

Rhine v. Casio, Inc., 183 F.3d 1342, 1345 (Fed. Cir. 1999) (“Use of the phrase ‘at least one’ means that there could be only one or more than one.”), citing *Kistler Instrumente AG v. United States*, 628 F.2d 1303, 1318, (Ct. Cl. 1980) (“Anyone with even the most rudimentary understanding of the English language understands ‘at least one piezo-electric crystal means lodged within said component means,’ to mean one or more crystals.”).

Burst, however, construes “at least one” to include less than one. Such a construction violates the most basic claim construction rule that the construction must be consistent with the claim language. See *Texas Digital*, 308 F.3d 1202-03.

The ordinary meaning of a “program” does not include a half of a movie, a few frames of a video, or a “short snippet.” B Br. at 6. Moreover, this ordinary meaning is consistent with Burst’s explanation of its claims to the Patent Office, although inconsistent with its current arguments. In procuring its patents, Burst described its claims containing this limitation to the Patent Office as “receiv[ing] and/or transmit[ing] an entire full motion video program, comprising tens of thousands of video frames.” Ex. L, Amendment “B” (January 4, 1991) at 8 (emphasis added). Thus, the intrinsic evidence supports Microsoft’s plain English construction.

Microsoft asks the Court to construe “said audio/video source information comprising a multiplicity of video frames collectively representing at least one full motion video program” to mean one or more entire video programs at 30 frames per second.

G. The “Audio/Video Representation” Must Be Processed as a Whole

The language of the claims plainly describes the “audio/video representation” being processed as a whole. Ignoring the claim language, Burst argues that the audio/video representation can be only part of a program by focusing entirely on the specification. See B Br. at 6-7. But the claims, not the specification, control the scope of the Burst’s patents. See *Johnson & Johnston Assocs. v. R.E. Serv. Co.*, 285 F.3d 1046, 1052 (Fed. Cir. 2002).

Microsoft’s construction is based on the claim language, which recites steps for processing the “audio/video representation.” See MS Br. at 51-52. The claims describe processing the

“audio/video source information” from receipt to compressing to storage to transmission. Each claim element refers to the result of the previous step and describes how to further process the “audio/video source information.” Thus, the claims make no provision for “different parts of the system [to be] working on different portions of the data at the same time” as Burst asserts. B Br. at 6.

Consistent with the claims, the specification is replete with references to processing the “audio/video” program as a whole, including each of the processing steps in Burst’s claims. See *Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 347 F.3d at 1371. For example, the specification explains that “[t]he VCR-ET can receive a video program at an accelerated rate via fiber optic port 18, e.g., from a variety of sources.” Ex. A, ‘995 patent, col. 7, lines 58-60. Similarly, the specification describes receiving an entire program and storing it before compressing it. col. 6, lines 60-63 (“In its first and simplest operating mode, AVRU 11 may be operated in the manner of a conventional VCR with signals from an antenna being received by tuner 16 and recorded directly on media 23 in analog form.”). The patents also describe compressing and storing the entire program as a whole. Ex. A, ‘995 patent, col. 5, lines 20-24 (“if no data compression technique is used, it would take approximately 51.03 gigabytes to store a 2 hour movie, but using the above compression techniques, it is estimated that memory 13 will require only 250 megabytes”). Similarly, the specification describes transmitting the entire program as a whole. Ex. B, ‘705 patent, col. 8, lines 10-15 (“a video library may be established which downloads video programs at an accelerated rate via optical fibers to a subscriber’s VCR-ET. After downloading, the program may be viewed...”).

Burst’s proposed construction is also inconsistent with its position in the Patent Office. Although Burst now claims that “Microsoft’s construction should immediately be discounted as, first, the claim language of the ‘995 patent refers to information—not a program” (B Br. at 6), it told the Patent Office the exact opposite: in describing the ‘995 patent’s claims, Burst repeatedly referred to the “audio/video source information” as a “program.” Ex. S, Amendment “A” (March 12, 1990) at 19-20 (“applicant’s claimed invention provide[s] an audio/video transceiver in which an analog and/or digital audio/video program can be received from a variety of sources.”) (“if the audio/video program is received

in analog format...”) (“if the audio/video program is received in digital format...”) (emphasis added).

Burst then explained each of the claimed features acting on a “program.” *Id.*

Indeed, the concept of processing a full program at a time is so integral to Burst’s claims that it distinguished the prior art on this basis in both the Patent Office and its Opening Brief. Per Burst, “*Haskell* teaches time compression multiplexing to allow for receipt of information in *real time* instead of a **time compressed representation**.” B Br. at 17 (emphasis in original). The Haskell patent, however, teaches sending multiple video transmissions over the bandwidth normally necessary for a single one. Burst argues that this is “real time” because each complete program takes its full view time to transmit – a two hour movie takes two hours to send. But in Haskell, multiple programs are sent in that two hours because each video program is broken into portions that travel faster than real time interleaved with portions of other video programs – e.g., if four such two hour movies are sent, the interleaved portions of each movie occupy the transmission line for an aggregate of 30 minutes (120 minutes/4). Ex. N, Haskell Patent, col. 3, lines 55-57. Thus, Haskell transmits program portions faster than real time. The only way to reconcile Burst’s statements in its brief and in the file history with the Haskell patent is that the claims reach only processing and transmitting a entire video program, not a portion of a program.

Burst also refutes its own argument that Microsoft’s construction “makes no technical sense” by admitting that “Burst has never debated the feasibility of such a system...” B Br. at 6-7. Yet Burst still argues that a system that processes data as a whole would need a “large intermediate memory [and] is not required by the random access memory taught by the ‘995 patent for storing compressed data.” B Br. at 7. First, the amount of memory involved is irrelevant to claim construction, especially in view of the clear claim language here. Certainly using a large intermediate memory was possible in 1988. See Ex. D, Von Herzen Decl., ¶ 54. Second, Burst’s complaints about the “random access memory” for holding the “compressed data” are misplaced because the patent describes exactly that, describing storing the entire compressed data for a 2 hour movie in memory and explaining that 250 megabytes of memory are necessary. Ex. A, ‘995 patent, col. 5, lines 22-24 (“using the above compression techniques, it is

estimated that memory 13 will require only 250 megabytes”).¹⁸ Similarly, the specification describes using “intermediate” storage. Ex. A, ‘995 patent, col. 2, lines 13-17 (“A still further object of the invention is to provide an effective and efficient means for intermediate storage of the audio/video program in digital memory as a means for achieving the transfer of the audio/video program from one tape or storage medium to another.”).

Microsoft asks the Court to construe “audio/video source information” consistent with the claim language, the specification, and Burst’s explanation to the Patent Office. For these reasons, Burst’s claimed “audio/video source information” must be a program processed as a whole.

H. “A Video Library, Said Video Library Storing A Multiplicity Of Items Of Audio/Video Source Information In Said Time Compressed Representation”

Burst argues that its claims containing the “video library” limitation do not require videos in a “time compressed representation.” B Br. at 36. To the contrary, Burst’s claims state expressly that the “video library” contains solely videos as “time compressed representation[s].”

Burst claims are to be construed as a whole and individual element should not be singled out and construed out of context. *See Brookhill-Wilk 1 LLC v. Intuitive Surgical Inc.*, 334 F.3d 1294, 1299 (Fed. Cir. 2003). It does no good to construe “video library” alone without the remainder of the claim language with which it appears.

Every one of Burst’s claims containing the “video library” limitation expressly states that the library contains multiple “time compressed representations.” ‘995 patent, claim 18; ‘839 patent, claims 18, 19; ‘705 patent, claim 21. Claim 18 of the ‘839 patent is representative; it requires a “video library storing a multiplicity of programs of audio/video source information as time compressed representations thereof for selective retrieval by a user in an associated burst time period.” (emphasis added).

¹⁸ Burst’s citation to the editing description in the specification also does not help it. B Br. at 7. The specification describes editing the “audio/video source information” as a whole – e.g., a “movie” or a “program” – even if the editing process necessarily only modifies certain portions of the data at a time. *See* Ex. A, ‘995 patent, col. 6, lines 28-32 (“Thus, one may use DCU 14 to rearrange the scenes in a movie, alter the movie sound track, etc. In addition, a program may be edited, one frame at a time, by changing the contrast, brightness, sharpness, colors, etc.”).

Burst's protests on this point raise the potential for jury confusion. Burst appears to be denying the clear language of its own claims. The Court should construe this claim language, as Microsoft proposes, as "programs of audio/video source information where each program is time compressed."

CONCLUSION

As described above and in Microsoft's Opening Brief, Microsoft asks the Court to use the disputed claim terms' ordinary meanings, to follow the intrinsic evidence, and to adopt its proposed construction. Microsoft also asks the Court to construe Burst's means plus function claim elements as required by Section 112, ¶ 6 and to identify the structures in the specification disclosed as performing the identified functions.

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Respectfully submitted,

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